CONCURRENT CONTROL OF SEMICONDUCTOR PARAMETRIC TESTING

IN THE CLAIMS

Please amend the claims as follows.

- 1. 37. (Cancelled)
- 38. (Currently Amended) A method of controlling a semiconductor parametric test system, comprising:

controlling via a control module concurrent operation of semiconductor test equipment and operation of parametric test instrumentation;

The method of controlling a semiconductor parametric test system of claim 29,

wherein the control module is further operable to provide fault-tolerant control of the test state via a state oscillator module, the state oscillator module operable to control the state of other system modules.

- 39. (Original) The method of controlling a semiconductor parametric test system of claim 38, wherein the state oscillator module changes the state of other system modules.
- 40. (Original) The method of controlling a semiconductor parametric test system of claim 38, wherein operation of the state oscillator module is controlled in synchronization with other system events by the control module.
- 41. (Original) The method of controlling a semiconductor parametric test system of claim 38, wherein the state oscillator module is operable to control module states within the system during operational superstates including an abort superstate, a pause superstate, and a lot run superstate; each superstate comprising an ordered sequence of states.
- 42. (Previously Presented) A method of controlling a semiconductor parametric test system, comprising:

controlling via a control module concurrent operation of semiconductor test equipment

and operation of parametric test instrumentation;

controlling the state of at least one other system module via a state oscillator module, the

state oscillator module controlled by the control module;

providing control of the semiconductor parametric test equipment via operation of a

parametric test equipment module; and

providing control of the parametric test instrumentation via operation of a test

instrumentation module.

(Previously Presented) A method of controlling a semiconductor parametric test system, 43.

comprising:

controlling via a control module implemented in software and executing on a

computerized system, concurrent motion of semiconductor test equipment and operation of

parametric test instrumentation;

controlling the state of at least one other system module via a state oscillator module, the

state oscillator module controlled by the control module and operable to control the state of other

system modules in synchronization with other system events;

providing control of the semiconductor parametric test equipment via operation of a

parametric test equipment module, wherein the semiconductor parametric test equipment

comprises at least one of a wafer loader, a wafer positioner, a wafer chuck, a wafer tray loader,

and a prober; and

providing control of the parametric test instrumentation via operation of a test

instrumentation module, wherein the parametric test instrumentation comprises at least one of a

test probe and a semiconductor test parameter module.

44-58. (Cancelled)